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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,668	10/17/2003	Gregg L. Sheddy	TN-3305	2621

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EXAMINER	
LEE, LAURA MICHELLE	

ART UNIT	PAPER NUMBER
3724	

MAIL DATE	DELIVERY MODE
02/18/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/688,668	SHEDDY ET AL.	
	Examiner	Art Unit	
	LAURA M. LEE	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,66-69,71,80,81 and 83-85* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,66-69,71,80,81 and 83-85* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/09/2010 has been entered. Claims 1-3, 5, 66-69, 71, 80, 81, 83-85 are pending, claim 1 is amended and claim 85 is new.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Patent 5,676,124) in view of Greenland (U.S. Patent 6,276,990) and in further view of Tsao (U.S. Patent 6,263,866). Lee discloses a saw (Fig. 1) comprising: a base formed as a tub (tray, 46); a frame assembly (frame 12) disposed on the base (46); a first rail (34) disposed on the frame assembly, the first rail having a longitudinal axis and being adjustable in a direction lateral to the longitudinal direction (see the transversely

elongated holes in Fig 2); a saw assembly (10) disposed on at least one of the base (46) and the frame assembly (12), the saw assembly (10) comprising a support assembly (cutting head assembly, 18), and a cutting wheel (22) driven by the motor assembly (20), the cutting wheel having a plane substantially parallel to the pivot axis ; a table (28) slidingly disposed on the first rail (34) so as to be movable relative to the saw assembly (10) in a direction substantially parallel to the longitudinal axis; and a switch (not numbered) electrically connected to the motor assembly (10) and disposed on the support assembly (18) above the table and proximate to the motor assembly (20); wherein one of the frame assembly (12) and the support assembly (18) has a first post (screw) and the other of the frame assembly (12) and the support assembly (18) has a first hole for receiving the first post; and one of the frame assembly and the support assembly has a second post (second screw) and the other of the frame assembly and the support assembly has a second hold for receiving the post (see Figures 1 and 2; the screws /holes aren't numbered)

Lee disclose not disclose that the blade is pivotable into angular positions and therefore does not disclose that the motor assembly (motor 20) is pivotally supported by the support assembly (18), the support assembly (18) remaining stationary relative to pivotal movement of the motor assembly (20) and the motor assembly (20) being pivotable about a pivot axis substantially parallel to the longitudinal axis. However, attention is directed to the Greenland tile saw. Greenland discloses an alternative configuration for the saw assembly, in which the saw assembly is positioned on a U-shaped frame, such that the saw and the motor assembly were pivotable in order to

position the blade to make angular cuts in the workpiece. It would have been obvious to one having ordinary skill in the art to have substituted the cutting assembly of Lee for the cutting assembly of Greenland for the similar benefit of providing angular cuts in the workpiece.

Therefore the modified device of Lee discloses a motor assembly (Greenland 18) pivotally supported by the support assembly Greenland 16), the support assembly (Greenland 16) remaining stationary relative to pivotal movement of the motor assembly (18) and the motor assembly (18) being pivotable about a pivot axis substantially parallel to the longitudinal axis.

To the extent that it can be argued that Lee does not disclose that the rail is adjustable, attention is further directed to the Tsao saw system which utilizes a similar rail system to move a table towards/away from the saw blade. Tsao disclose the same elongated holes as shown by Lee (see the transversely elongated holes in Figs 1 and 4) and furthermore discloses that the rail is adjustable (see col. 2, lines 6-12). It would have been obvious if not already, to have made the rails of Lee adjustable such as taught by Tsao in order to adjust the position of the rail to accommodate slight variations in table length and/or roller-to-roller distance.

In regards to claim 2, the modified device of Lee discloses wherein the first rail (34) has a first end, and the table (28) is movable beyond the first end (table over hangs the rollers).

In regards to claim 3, the modified device of Tsao discloses wherein the table (28) is movable beyond the base (46) (table over hangs the rollers).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Patent 5,676,124) in view of Greenland (U.S. Patent 6,276,990) and Tsao (U.S. Patent 6,263,866) in view of Fuhrman et al. (U.S. Patent 6,637,424), herein referred to as Fuhrman. The modified device of Lee does not disclose that the frame is made out of aluminum. However, it is old and well known to use metal members such as steel and aluminum for structural parts such as the frame. Attention is also directed to the Greenland tile saw that discloses a similar setup to the Lee tile saw, except that the frame is formed from aluminum instead of steel. As aluminum is a well known structural element, and as aluminum is a strong and cheaply processed and easily malleable material, it would have been obvious to one having ordinary skill in the art at the time the invention was made to constructed the Lee frame from aluminum for its structural rigor. Additionally it is noted that since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.
In addition, it is also noted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the frame from aluminum as aluminum is also a well known structural material that is generally cheaper than steel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

5. Claim 85 rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Patent 5,676,124) in view of Greenland (U.S. Patent 6,276,990) and in further view of Tsao (U.S. Patent 6,263,866). The modified device of Lee does not disclose that the posts (screws) have different widths. However, this difference between the instant invention and the modified device of Lee is a matter of obvious design choice which does not affect the overall structure of the sawing apparatus. There are many known ways of attaching two items, and posts/ screws are one of such well known ways in the art. Changing one screw/post to have a larger width than the other is not a critical element and would have been an obvious modification to one having ordinary skill in the art at the of the invention to have designed the sizes of the posts/screws to be of whatever size necessary to support the support assembly to the frame.

6. Claims 66-68, 80, 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further view of Lee (6,272,961), Jameson (3,777,792), Weissman (4,885,965), Mayfield (5,063,806), Rueb (5,577,428), Welch (5,906,538), Greenland (6,080,041), and Gorgol et al (6,273,081). In regards to claims 66, 67 and 80, Tsao discloses a saw (10) comprising: a base formed as a tub (sink, 21); a frame assembly (frame 22) disposed on the base (21); a first rail (224) disposed on the frame assembly, the first rail having a longitudinal axis and being adjustable in a direction lateral to the longitudinal direction (see the transversely elongated holes in Figs 1 and 4 and col. 2, lines 6-12); a saw assembly (25) disposed on at least one of the base (21) and the

frame assembly (22), the saw assembly (25) comprising a support assembly (225), and a cutting wheel (26) driven by the motor assembly (24), the cutting wheel having a plane substantially parallel to the pivot axis; a table (23) slidingly disposed on the first rail (224) so as to be movable relative to the saw assembly (25) in a direction substantially parallel to the longitudinal axis; and a switch (switch 256) electrically connected to the motor assembly (24) and disposed on the support assembly (225) above the table and proximate to the motor assembly (22).

Tsao disclose not disclose that the blade is pivotable into angular positions and therefore does not disclose that the motor assembly (motor 24) is pivotally supported by the support assembly (225), the support assembly (225) remaining stationary relative to pivotal movement of the motor assembly (24) and the motor assembly (24) being pivotable about a pivot axis substantially parallel to the longitudinal axis. However, attention is directed to the Greenland tile saw. Greenland discloses an alternative configuration for the saw assembly, in which the saw assembly is positioned on a U-shaped frame, such that the saw and the motor assembly were pivotable in order to position the blade to make angular cuts in the workpiece. It would have been obvious to one having ordinary skill in the art to have substituted the cutting assembly of Tsao for the cutting assembly of Greenland for the similar benefit of providing angular cuts in the workpiece.

Therefore the modified device of Tsao discloses a motor assembly (Greenland 18) pivotally supported by the support assembly Greenland 16), the support assembly (Greenland 16) remaining stationary relative to pivotal movement of the motor assembly

(18) and the motor assembly (18) being pivotable about a pivot axis substantially parallel to the longitudinal axis, wherein the support assembly (Greenland 16/26)comprises a generally U-shaped member (16) having first and second legs (top and bottom horizontal portions) and the motor assembly (22) pivotally supported by the first and second legs via guard 26.

However, the modified device of Tsao still does not disclose that the location of the switch is such that the switch is disposed on the generally U-shaped member. However, attention is also directed to the Lee, Jameson, Weissman, Mayfield, Rueb, Welch, Greenland, and Gorgol et al. references. These references are cited as cumulative evidence that it is well known in the art to locate the power switch for a cutting tool almost anywhere on a saw. Thus, even though the specific location of the switch that Applicant is claiming is not specifically taught, the indication from the prior art is that the location of the switch would have been an obvious matter of design choice dependent on the suitability of that location for whatever desired reason, such as dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the work piece and/or product. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to have provided a switch on the saw as claimed, such as on the supporting arm, 16, as suggested by Lee, Jameson, Weissman, Mayfield, Rueb, Welch, Greenland, and Gorgol et al. on the Tsao device in order to accommodate dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the workpiece and/or product.

In addition, it is also noted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the switch in an alternative location in order to accommodate dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the work piece and/or product since it has been held the shifting of parts to different positions is a known variable. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

In regards to claim 80, the modified device of Tsao discloses a support member (supporting 16, see Figs 3/4) disposed on at least the base and the frame assembly and a generally u-shaped member (16).

In regards to claim 82-84, the modified device of Tsao discloses wherein the switch is disposed on the support assembly (Greenland, 16), so that when the motor assembly (Greenland 24)is pivoted about the pivot axis, the support assembly and the switch remain stationary relative to the pivotal movement of the motor assembly.

7. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao in view of Greenland (U.S. Patent 6,276,990), Lee (6,272,961), Jameson (3,777,792), Weissman (4,885,965), Mayfield (5,063,806), Rueb (5,577,428), Welch (5,906,538), Greenland (6,080,041), and Gorgol et al (6,273,081) and in further view of McCambridge et al. (U. S. Patent 4,350,193), herein referred to as McCambridge, Marcoux et al. (U.S. Patent 3,342,226) Brenta (U.S. Patent 4,105,055), Sanfillipo (U.S. Patent 6,745,803) and Otto (U.S. Patent 5,161,590). The modified device of Tsao discloses the use of an electrical plug mounted to the support member to power the saw

from a wall outlet, but not disclose that the end of the plug/cord is instead terminated at an electrical outlet. However, attention is directed to the McCambridge, Marcoux, Brenta, Sanfillip and Otto reference that all discloses work tables with directly incorporated outlets. These references are cited as cumulative evidence that it is well known in the art to utilize an outlet on a worktable such as shown by Greenland instead of directly engaging the power tool with an AC wall outlet. The outlets provide available and convenient electrical power for utilization with a plurality of tools at the same time, such that only a single cord is required to run to the wall outlet, instead of two cords to operate both the pump and the motor of the saw. It similarly would have been obvious to one having ordinary skill in the art to have incorporated an outlet into the Tsao support instead of the plug as taught by McCambridge, Marcoux, Brenta, Sanfillip and Otto to minimize the number of cords to power the pump and saw motor plugged into a wall outlet or to power additional tool attachments.

8. Claims 71 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao in view of Greenland (U.S. Patent 6,276,990), Lee (6,272,961), Jameson (3,777,792), Weissman (4,885,965), Mayfield (5,063,806), Rueb (5,577,428), Welch (5,906,538), Greenland (6,080,041), and Gorgol et al (6,273,081) and in further view of Sigetich et al. (U.S. Patent 4,428,159) The modified device of Tsao discloses the claimed invention except is silent as to the type of switch and therefore does not appear to disclose that the switch comprises a single throw, double pole switch (i.e. a toggle switch) although Greenland does discloses that a second means may be provided to

automatically turn on the motor as a tile is moved toward the motor assembly, and also a manual switch 28 may also be provided; see col. 3, lines 25-30. However, as Greenland is silent as to the type of switch, it would speculative to positively state that Greenland discloses a toggle switch. However, attention is directed to the Sigetich tile saw cutter which utilizes a toggle switch (51) to energize and de-energize the motor 31 and the pump 53 at the same time. As Greenland also incorporates the use of a pump, but is silent as to how the pump and motor are triggered to operate together and as toggle switches are old and well known in the art for providing on/off connections, it would have been obvious to one having ordinary skill in the art to have incorporated a wiring system such that a toggle switch was incorporated (if not already) such that the coolant pump would operate in sync with the motorization of the saw blade for turning the power on/off.

Response to Arguments

9. Applicant's arguments filed 1/06/2010 have been fully considered but they are not persuasive. The applicant contends that the modification of the Greenland reference as to the rearrangement of the switch location is unobvious because it would destroy the Greenland reference. More specifically, the applicant points out that Greenland discloses automatic activation of the power switch mounted to the motor assembly. However, this switch is only to activate the motor and there is another manual switch, 28, provided on the motor housing 24 by which to turn the power on and off. Thus there are two activation mechanisms, one switch 28, to provide power to the saw and another

switch to turn the motor on once the switch 28 is activated. Alternatively it could be argued that there are two switches to provide power to the motor. Thus it would not affect the automated switching of power to the motor by the relocation of switch 28, which does not have a function in the automatic motor activation. Therefore as shown by Lee, Jameson, Weismann, Mayfield, Rueb, Welch, Greenland and Gorgol to be known to locate the power switch in any number of operable locations, it would have been obvious to arrange the Tsao switch of in any number of locations in order to accommodate dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the workpiece and/or product.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/
Examiner, Art Unit 3724
2/13/2010